

The opinion in support of the decision being entered today was **not** written for publication and is **not** binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* JAN L. CLATTY

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Appeal No. 2004-2293  
Application No. 09/876,778

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ON BRIEF

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Before OWENS, KRATZ, and TIMM, *Administrative Patent Judges*.  
TIMM, *Administrative Patent Judge*.

***DECISION ON APPEAL***

This appeal involves claims 1-7, which are all of the claims pending in this application.

We have jurisdiction over the appeal pursuant to 35 U.S.C. § 134.

### **INTRODUCTION**

Claims 1-7 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 6,180,686 B1 issued to Kurth on January 30, 2001 (Kurth).<sup>1</sup> Appellant states that the claims stand or fall together (Brief, p. 3). We select claim 1 to represent the issues on appeal.

Claim 1 reads as follows:

1. An isocyanate-reactive component useful for the production of a rigid closed cell polyurethane foam by a RIM process comprising:
  - a) from 0.5 to 30% by weight, based on total weight of isocyanate-reactive component, of a polyol based on vegetable oil, fish oil or oil derived from animal fat,
  - b) from 5 to 80% by weight, based on total weight of isocyanate-reactive component, of an isocyanate-reactive material which is different from a) having a functionality of at least 1 and a number average molecular weight of from 400 to 10,000,
  - c) a chain extender or a crosslinking agent,
  - d) a blowing agent, and
  - e) a catalyst.

We affirm and in so doing we adopt the Examiner's well stated findings of fact and conclusions of law as our own. We add the following for emphasis.

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<sup>1</sup>The rejection of claims 1-7 under 35 U.S.C. § 102(b) as anticipated by WO 00/234,491 has been withdrawn by the Examiner (Answer, p. 3).

**OPINION**

There is no question here that Kurth suggests formulating a composition including a polyol based on vegetable oil as required by part a) of claim 1 along with ingredients meeting parts c) through e) of the claim. The question is whether Kurth fairly suggests the additional inclusion of an ingredient meeting part b) of the claim in the concentration further required by the claim.

The Examiner's rejection is based upon the fact that Kurth describes a isocyanate-reactive component including blown soy oil, crosslinking agent, blowing agent, and catalyst as required by claim 1, parts a) and parts c) through e). It is further based upon the fact that Kurth also provides evidence that, conventionally, such isocyanate-reactive compositions were formulated with petroleum-based polyols of the type required by part b) of claim 1. Kurth seeks to replace those conventional polyols with vegetable oil based polyols and describes doing so in toto. However, we agree with the Examiner that once one of ordinary skill in this art understood that vegetable oil based polyols as well as petroleum-based polyols are useful for formulating isocyanate-reactive compositions, the use of the two types of polyols together would have been obvious. When the prior art teaches several compositions useful for the same purpose, it is *prima facie* obvious to combine two or more of those compositions for use for the very same purpose. *In re Kerkhoven*, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980).

Appellant argues that there is no motivation to include petroleum-based polyols along with the vegetable oil based polyols because Kurth teaches avoidance of the petroleum-based polyols. We agree that there is no express suggestion of making the combination in Kurth. But such an express suggestion is not required to establish a *prima facie* case of obviousness. Instead, it “may come from the prior art, as filtered through the knowledge of one skilled in the art.” *Motorola, Inc. v. Interdigital Tech. Corp.*, 121 F.3d 1461, 1472, 43 USPQ2d 1481, 1489 (Fed. Cir. 1997); see also *Pro-Mold & Tool Co. v. Great Lakes Plastics, Inc.*, 75 F.3d 1568, 1573, 37 USPQ2d 1626, 1630 (Fed. Cir. 1996). One of ordinary skill in the art would take known property and economic considerations into account in selecting the polyol or combination of polyols to use. Kurth indicates that the selection of polyol does not dramatically impact either the processing or the qualities of the end product (Kurth, col. 4, ll. 14-20). Economic factors alone can provide motivation to make a modification. *In re Thompson*, 545 F.2d 1290, 1294, 192 USPQ 275, 276-77 (CCPA 1976). Moreover, selection may hinge on availability of reactants as well. We find that there is sufficient factual evidence to support the Examiner’s finding of a suggestion to use both types of polyols in the composition of Kurth.

Appellant argues that one of ordinary skill in the art would not know how much of the petroleum-based polyol to include (reply Brief, pp. 2-3). We cannot agree. Under the facts of this case, the concentration would be determinable through routine experimentation. The evidence indicates that useful products can be obtained at a wide range of concentrations. See

Kurth at column 4, lines 17-20 which states that “[t]he qualities of the final flexible or semi-rigid urethane foam produced using the vegetable oil are consistent with those produced using high grade, expensive [petroleum-based] polyol.” In such a situation, the burden is on the applicant to establish non-obviousness through unexpected results or other evidence of secondary considerations. See *In re Woodruff*, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936 (Fed. Cir. 1990); *In re Ranier*, 377 F.2d 1006, 1010, 153 USPQ 802, 805 (CCPA); *In re Bourden*, 240 F.2d 358, 361, 112 USPQ 323, 325 (CCPA 1957); *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

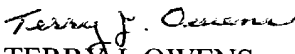
As a final point, we note that Appellants base no arguments upon objective evidence of non-obviousness such as unexpected results. We conclude that the Examiner has established a *prima facie* case of obviousness with respect to the subject matter of claims 1-7 which has not been sufficiently rebutted by Appellants.

### **CONCLUSION**


To summarize, the decision of the Examiner to reject claims 1-7 under 35 U.S.C. § 103(a) is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED

  
TERRY J. OWENS  
Administrative Patent Judge

  
PETER F. KRATZ  
Administrative Patent Judge

  
CATHERINE TIMM  
Administrative Patent Judge

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